TECHNICAL MEMORANDUM

Date: September 7, 2011

Project No.: 0131646011.900.01

To: Will Ernst

Company: Boeing

From: Scott Matthees

cc: Kent Angelos & Ted Norton (Golder),

Email:

RE: COMPLETION OF CONDUIT TRENCH EXCAVATIONS – STEAM UTILIDOR

1.0 INTRODUCTION

Boeing completed the removal of pavement and the excavation of shallow trenches at two locations in July 2011 to install control panels and electrical conduits that will supply electrical power to sump pumps in a steam utilidor in the 2-10 and North Areas of Plant 2 (Figures 1 and 2). Both of the trenching areas were located in parking lots. The trenches for the electrical conduits at Location 1 were approximately 20 feet long and the trenches at Location 2 were approximately 40 feet long. The trenches measured approximately 2 feet wide by 2 feet deep. The shallow trenching for the electrical conduit installations occurred primarily in base rock and fill materials, and resulted in the removal of approximately eight cubic yards of material. The base rock and fill materials were reused to backfill the trenches after the conduits were installed. A Technical Memorandum regarding the steam utilidor project was provided to EPA on May 17, 2011.

Neither trench location was located within a Resource Conservation and Recovery Act (RCRA) unit, and groundwater was not be encountered in the 2-foot deep excavations, as the depth to groundwater at Plant 2 is typically 10 to 12 feet below ground surface (bgs).

2.0 HISTORICAL ANALYTICAL DATA

A preconstruction review of historical analytical data indicated that no soil sampling had been conducted within a 25-foot radius of the either of the excavations. The likelihood that the excavated material would consist of base rock, bedding and uncontaminated fill material, precluded the need for planning to sample before, during or after the excavation activity.

3.0 CONSTRUCTION SUPPORT ACTIVITIES

Construction support activities included visual monitoring of the removal of pavement and soil from the excavations, and monitoring the excavated materials for volatile organic compounds (VOCs) using a photoionization detector (PID). Specifically, the field monitoring activities consisted of the following:

- Conducting an inspection of the excavation area. The preliminary inspection included a written description of the condition of the excavation area.

Golder Associates Inc.
18300 NE Union Hill Road, Suite 200
Redmond, WA 98052 USA
Tel: (425) 883-0777 Fax: (425) 882-5498 www.golder.com

- Field monitoring of the excavation included visual monitoring of the concrete, base rock, fill, and/or soil materials for color changes or staining, odors, sheens, and using a PID to monitor the soils for VOCs.

The excavated pavement and soil materials were segregated as they were removed, and the soil materials were reused to backfill the excavations and the pavement was properly managed for disposal. No soil sampling was conducted, as the shallow excavations were completed in base rock and fill materials, and field monitoring during excavation did not detect visual or olfactory signs of contamination.

Attachments or Enclosures:

LIST OF FIGURES

Figure 1 – Location and Vicinity
Steam Utilidor Conduit Trench Excavations
Figure 2 – Conduit Trench Excavation Areas – Steam Utilidor

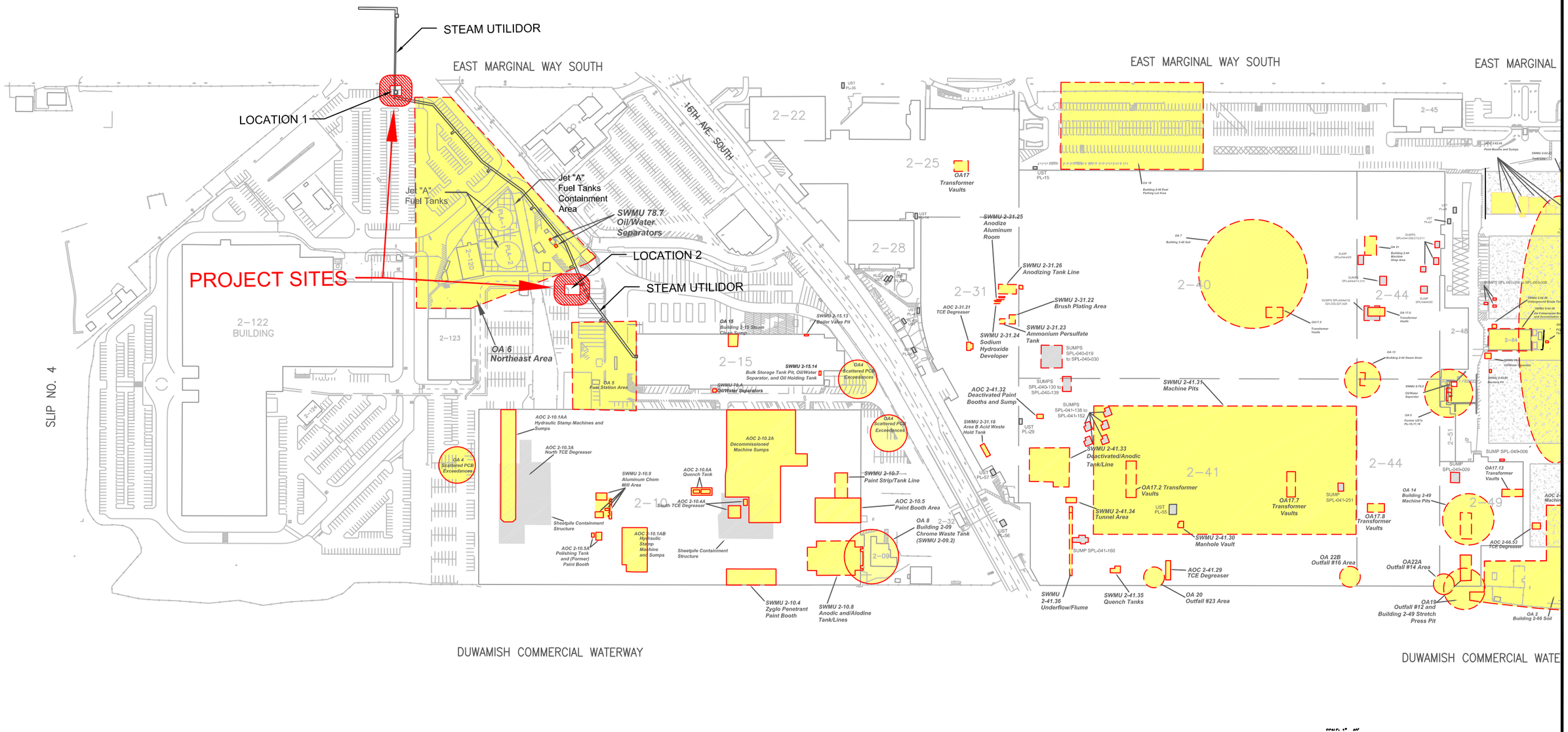

FIGURE **1**

LOCATION AND VICINITY
STEAM UTILIDOR CONUIT TRENCH EXCAVATIONS

Boeing/Plant 2 Construction Support/Wa

Golder Associates

EAST MARGINAL WAY SOUTH

LOCATION 1

14TH AVE. SOUTH

PLA-1

PLA-2

2-120

LOCATION 2

STEAM UTILIDOR

2-122
BUILDING

2-123

2-15

LEGEND

25-FOOT BUFFER AROUND
TRENCH EXCAVATION AREA

TRUE NORTH

PLANT NORTH

0 100 200
SCALE IN FEET

FIGURE **2**

CONDUIT TRENCH EXCAVATION AREAS - STEAM UTILIDOR

Boeing/Plant 2 Construction Support/Wa

V:\PROJECTS_2001 PROJECTS\013-1646 Boeing - Plant 2_Angelos\Steam Utilidor Tech Memo\Steam Utilidor.dwg | Fig 2 Trench Excav | Mod: 05/13/2011, 09:22 | Plotted: 05/13/2011, 09:24 | smatthees

Golder Associates